Specimen Ridge Day Hike

National Park Service
U.S. Department of the Interior

Yellowstone National Park

Welcome to the Petrified Trees of Specimen Ridge

Overlooking a valley of the Lamar River, Specimen Ridge offers outstanding views and an unparalleled opportunity to observe Yellowstone's geology up close. The route shown on this map takes you directly to this fascinating site. The other side of this sheet explains the geology of Specimen Ridge.

Cautions

All Wildlife: You must stay at least 100 yards (91 m) away from bears and wolves; and at least 25 yards (23 m) away from all other animals—including birds.

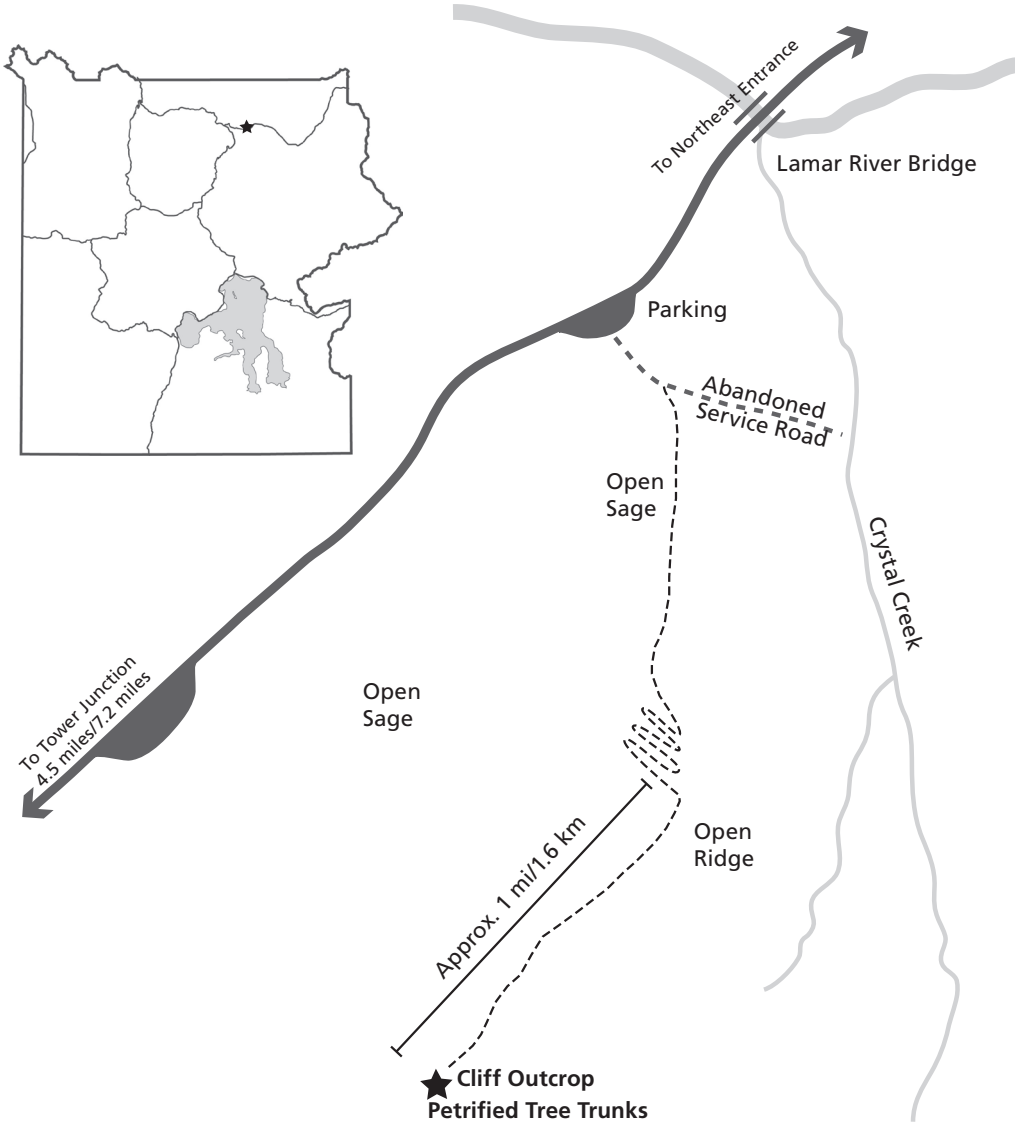
Bears: Although your chance of an encounter is low, your safety is not guaranteed. Minimize your risks by making loud noises, shouting, or singing. Hike in groups and use caution where vision is obstructed. Do not hike after dark. Avoid carcasses; bears often defend this source of food.

Strain: The route is extremely strenuous. Allow plenty of time and carry extra water. This hike is not recommended for anyone with joint, heart, or respiratory problems.

Weather: Be prepared for sudden changes in weather; wear layers (avoid cotton), carry raingear, hat, and gloves. If you see lightning in the area, leave the ridge immediately. Avoid exposed places and isolated trees.

Loose Rock: Watch your footing; be careful not to kick loose rocks onto hikers below you, and watch for rocks from above.

Collecting natural or cultural objects—like rocks, feathers, flowers, antlers, arrowheads, pipestems, and other artifacts—is illegal. Please leave everything where you find it.



Trail Description

Don't confuse this route with the Specimen Ridge Trail.

Distance, one way: 1.5 miles (2.4 km)

Estimated time: 3–4 hours

Difficulty: extremely strenuous

Trailhead: striped pullout
4.5 miles (7.2 km) east of Tower Junction on the Northeast Entrance Road.
Marked by a sign reading "trailhead."

This trail is not a part of the longer Specimen Ridge Trail. It is a separate, unmaintained trail, along an unmarked route.

From the pullout, look southwest, away from the road. Toward the top of the ridge, at approximately the two o'clock position, you will see a cliff outcrop that contains the petrified trees. Keep this in mind as your ultimate destination.

To begin your hike, follow the abandoned service road from the pullout for about 100 yards (91 m). Veer right onto the intersecting trail and start climbing toward the ridge. Stay on the most the most obvious trail to the top of the open ridge. Follow the ridge line to the southwest in the direction of the cliff outcrop you saw from below. A wildlife trail cuts across, below the top of the ridge, and traverses a forested area before ending at the trees.

Take in the magnificent view across the valley. To the north, you can see the Slough Creek Valley and Absaroka Range. Descend the way you came up.

What is petrified wood?

Petrified wood is a fossil of woody vegetation.

Most fossils are imprints of plants or animals. Petrified wood is a three-dimensional fossils that is created when trees, or tree parts, are covered by silica-rich sediment. Water leeching through the sediment dissolves the minerals in the soil and penetrates the cells of the tree. As it flows through the plant tissue, it leaves the minerals behind to replace the vegetable matter with stone.

Take only photos—Collecting natural or cultural objects is illegal.

About Specimen Ridge

Nearly 150 species of fossil plants from Yellowstone have been found, spanning 500 million years, from the Cambrian to the Holocene. Most petrified wood and other plant fossils come from Eocene deposits about 50 million years old, which occur in many northern parts of the park.

Best known are the fossil forests of Specimen Ridge, where the remains of hundreds of these 50-million-year old trees stand exposed on a steep hillside, with trunks up to eight feet in diameter and some more than 20 feet tall. The specimens include sequoia, fir, and numerous deciduous species.

The first fossil plants from Yellowstone were collected by the early Hayden Survey parties. An 1878 report referred to fossil "forests" on Amethyst Mountain opposite the mouth of Soda Butte Creek.

Around 1900, F. H. Knowlton proposed the theory that the petrified trees on Specimen Ridge were forests petrified in place. His theory remained dominant through most of the 20th century.

A more recent theory proposes the trees were uprooted by volcanic debris flows and transported to lower elevations. The 1980 eruption of Mount St. Helens supported this idea. Its mud flows transported trees to lower elevations and deposited some trees upright—similar to what you see on Specimen Ridge.

Additional references

www.yellowstoneassociation.org
www.greateryellowstonescience.org

Yellowstone Resources & Issues (annual), Yellowstone National Park & Yellowstone Association

Windows Into the Earth: The Geologic Story of Yellowstone and Grand Teton National Parks, Robert B. Smith and Lee J. Siegel

Interpreting the Landscape: Recent and Ongoing Geology of Grand Teton and Yellowstone National Parks, John M. Good and Kenneth L. Pierce

Roadside Geology of Yellowstone Country, William .J Fritz.

Geology underfoot in Yellowstone country, Marc S. Hendrix.

For more information

www.nps.gov/yell

Visitor centers have a free hike handout for each major area of the park. A "Day Hike Sampler," with a hike or two per area, is also available along with several guides for trails throughout the park.